Tobacco in Primary Care

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Clinical Practice Guideline for Tobacco Use & Dependency

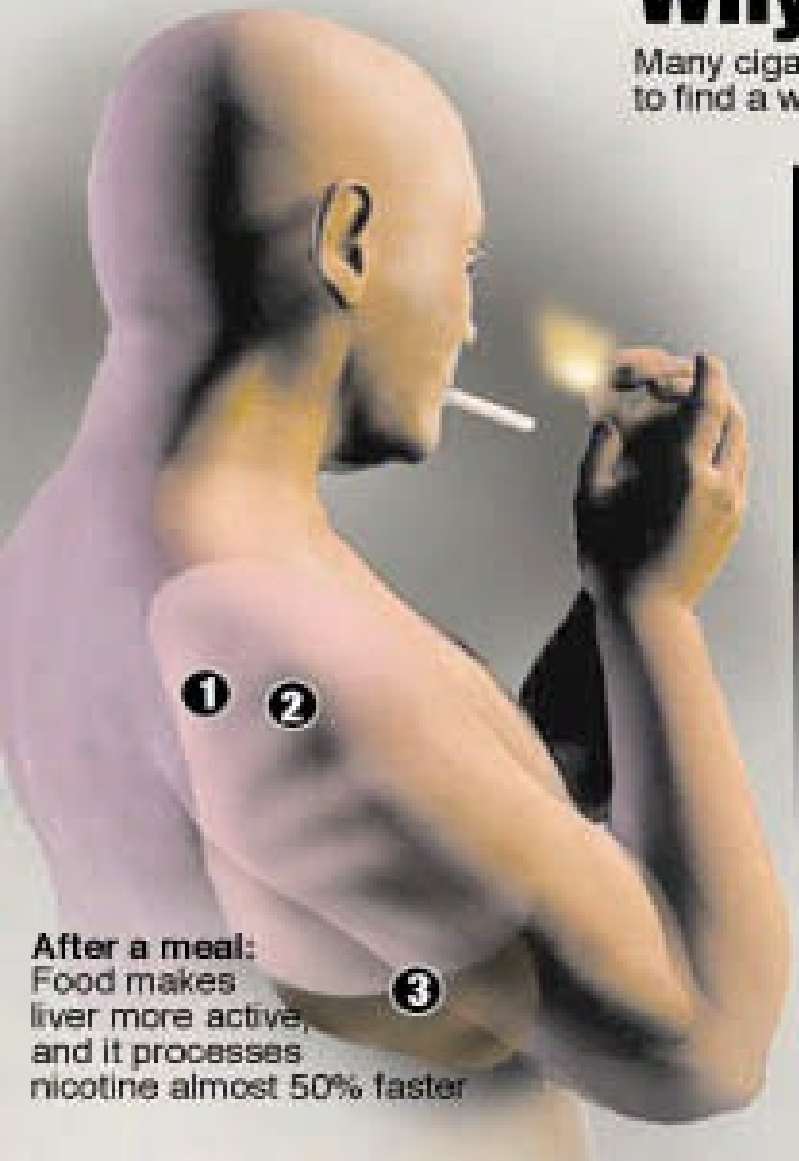
- Tobacco Use Statistics
- Strategies for Implementation
- Health Promotion Behavioral Program
- Pharmacology

Tobacco Use Statistics

- 70% of smokers now want to quit
- 46% of smokers try to quit each year
- Nicotine is an addictive drug, more addictive than heroine and cocaine
- Tobacco dependency is a chronic condition the warrants repeated treatment
- The average person takes 5 serious attempts to quit before successful

Why nicotine is so addictive

Many cigarette smokers want to quit but can't because they are not able to find a way to overcome their addiction. Here's what is happening:



After a meal:
Food makes liver more active, and it processes nicotine almost 50% faster

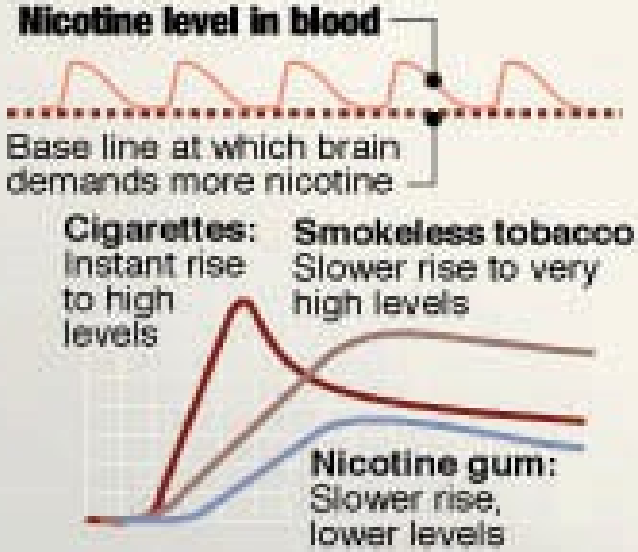
How body processes nicotine

1. Enters bloodstream
2. Attaches to fat molecules
3. Liver removes from bloodstream

Within about 2 hours, 50% has been changed to cotinine, a waste product

How nicotine changes the body

- **Structure of brain:** Nerve cells grow extra nicotine receptor sites
- **Physiological cycle develops:** Brain activity, nervous system reactions and hormone levels rise and drop between doses of nicotine


Nicotine level in blood
Base line at which brain demands more nicotine
Cigarettes: Instant rise to high levels
Smokeless tobacco: Slower rise to very high levels
Nicotine gum: Slower rise, lower levels

What is 'addiction'?

Two most obvious signs:

- **Dependence**: Persistent use in spite of harmful
- **Withdrawal**: Specific symptoms produced by stopping use

Symptoms of nicotine withdrawal include temporary impairment of thinking and brain function

SOURCES: Jack E. Henningfield of Johns Hopkins School of Medicine, Karen Ahijevych of Ohio State University, American Cancer Society, National Institute of Drug Addiction

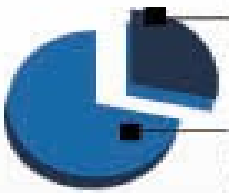
KRT

Tobacco's worldwide human cost

About a third of the world's adults – 1.1 billion people – smoke tobacco. Some estimates of the consequences of their smoking:

DEATHS DUE TO SMOKING

■ **3.5 million** people a year, or about 10,000 people a day



■ **500 million** people who smoke today will die from it

✔ *That's 10 times the number of people who died in World War II*

✔ *Half of those smokers will die in middle age, losing an average of 20 to 25 years of life*

A PREVENTABLE EPIDEMIC

■ Heart disease and cancer can be caused by smoking

1998: They represented **43%** of illness worldwide

2020: Figure will rise to **73%**

In 2020, disease caused by smoking will become the leading cause of death

ECONOMIC COST

■ **Worldwide** health care costs associated with smoking:

$200 billion a year

Some figures for comparison:

Total sales by General Motors

$162 billion a year*

Total production of Bangladesh economy (GDP)

$155 billion a year

The United Nations spends

$1.3 billion a year

*12 months ending March 31, 1999

SOURCES: World Health Organization, World Almanac, Market Guide, KRT Photo Service

Cessation Statistics

- 7% of smokers are able to quit on their own.
- Can increase that from 15%-30% by using dependency counseling and pharmacotherapies.
- Even brief treatments such as physicians advice to quit can increase abstinence significantly.
- Smokers cite physicians advice to quit as an important motivator

Role of Clinical Intervention

- 70% of smokers visit a health care setting each year
- Brief tobacco dependency treatment is effective
- Strong dose-response relationship between intensity of counseling and effectiveness
- Counseling most effective
  - practical
  - social support as part of treatment
  - social support arranged outside of treatment

Strategies for Implementation

Intervention Steps- 5 As

1. **Ask**-about tobacco use
2. **Advise**-to quit with a personal message
3. **Assess**-stage of readiness
4. **Assist-**with both counseling and pharmacotherapy
5. **Arrange**-for follow-up or referral

Ask

- Non-judgmental
- Open ended question, “Tell me about your smoking habit.”
- “I see that you use chewing tobacco, how long have you been using it?”
- “Do you use any form of tobacco?”

Goal: Ask every patient if he uses tobacco and document in PHCA

Advise-tailor the message

- Give information about the effects of smoking on <u>their</u> body
- Stress the benefits <u>for them</u> of quitting
- Give a clear recommendation to quit
- The 4 Rs

Goal: A clear strong personalized message to urge every smoker to quit.

The 4 Rs

- **Relevance:** Information relevant to patient's disease status, family life or social situation has the greatest impact.
- -This is a very individualized message you give them based on your assessment of their situation.
- "What does smoking do for you?"

The 4 Rs

- **Risks:** Ask the person to identify the potential negative consequences of smoking.
- -It has to be the patient who identifies their negative consequences of smoking, you can’t do it for them.
- “How do you think smoking will effect your life?”

The 4 Rs

- **Rewards:** Ask the person to identify the potential benefits of quitting. Highlight and elaborate the most relevant benefits.

- -”How do you think you will feel after you quit and what will the benefits be for you?”

The 4 Rs

- **Repetition:** Repeat the message at each visit. The message is that they need to quit and we are interested in helping them.

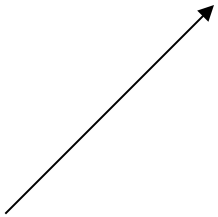
- -”Have you made any progress toward quitting?”

Assess-Stages of Change

- “If we give you some help would you be willing to give it a try to quit smoking?”
- Goal to move forward along the continuum

How we **Want** to change

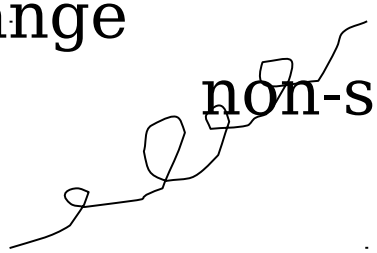
non-smoker



smoker

How we **Actually** change

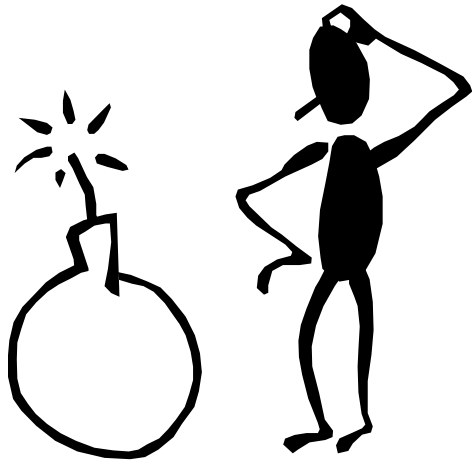
non-smoker



smoker

Stage 1 : Precontemplation

- Not even aware that a change is needed
- May be resistive to change
- The cost to change is too high



Assist & Arrange

Discuss benefits to the patient. Personalize the smoking cessation message.Avoid arguments

Goal: Move patient toward considering quitting-Contemplative

Stage 2 : Contemplative

- Realize a change is needed
- Intend to change
- Not sure how to start
- Ambivalent

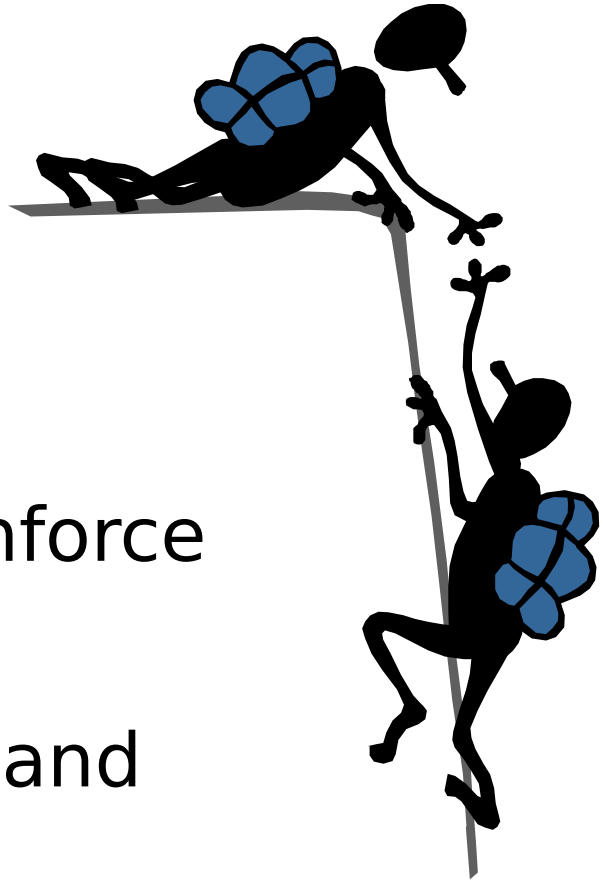
Assist & Arrange

Affirm their desire to change. Provide HP referral information, *Smart Move* brochure, encourage making a plan.

Goal: Move patient toward a quit date-Preparation

Stage 3 : Preparation

- Are taking some action
- Have a plan and are starting to make changes



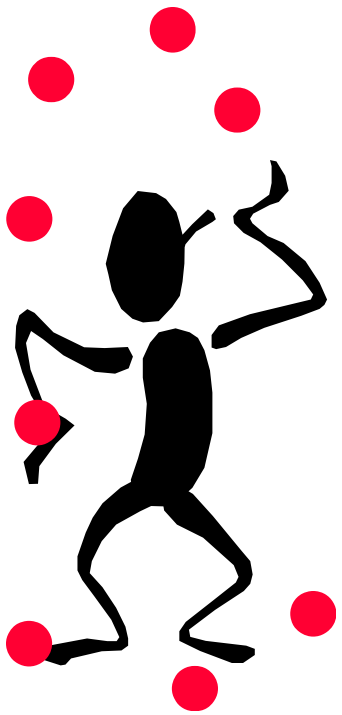
Assist & Arrange

Affirm, support, encourage, reinforce reasons for quitting

Provide HP referral information and *Smart Move* brochure

Goal: Move patient to stop smoking-

Stage 4 : Action



- Taking action on a regular basis
- Developing a regular habit
- Picking yourself up after each setback

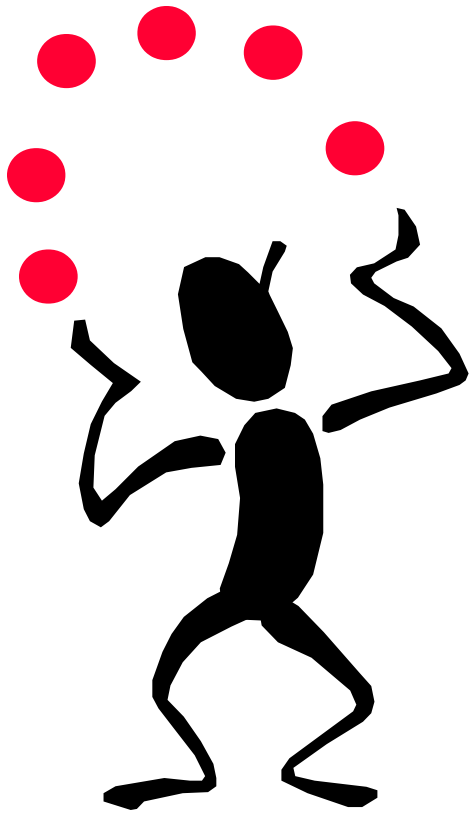
Assist & Arrange

Assist in resolving any residual problems

Goal: Reinforce the decision, review the benefits, reinforce reasons for quitting, prevent

Stage 5 : Maintenance

- Taking action on a regular basis
- Behavior change has lasted more than 6 months
- Change is a way of life



Assist & Arrange

Affirm, congratulate, reinforce reasons for quitting

Goal: Prevent relapse and affirm stress management techniques

Case Study-Donna

Donna is a 56 year old 2 pack a day smoker. She has smoked for 40 years. She has never really tried to quit for more than a day. She knows it is bad for her but she worries she can’t quit because she has always smoked.

John

John is 26 and has been using chewing tobacco since he was in high school. He believes it is much safer than cigarettes and not near as bad as other things he sees people doing. He says it helps him through his boring day and doesn’t bother anyone else since there is no smoke involved.

Bill

Bill is 35 and has been smoking since he was 12. He has tried 4 times to stop smoking, one time lasting 2 years. He knows it is not good for you but he can’t stand the way he feels trying to quit. He says he tried the patches the last time he attempted to quit but they made him sick.

Tina

Tina has not had a cigarette for just over 1 month now. She tried several times before this to quit, but was only able to go for 2 weeks. Her husband is being deployed next month and she will be left at home with three small children. She worries if she can do without smoking when he leaves.

Health Promotion Behavioral Program

- Understanding the nicotine habit and addiction
- Establishing personal reason for quitting
- Setting a quit date
- Making a plan for quitting
- Recovery symptoms (withdrawal)
- Stress Management and support
- Relapse prevention

Smoking Cessation Program

- American Lung Association-*Freedom From Smoking* classes
- One-to-one counseling
- Support adjuncts-pharmacotherapy, self-study book and tape, substitute cigarettes, mint snuff, relaxation tapes, videos, brochures for all stages, stress balls, water bottles

Pharmacotherapy Agents

Name	Dosing Regimen	Contradictions	Adverse Drug Reactions
Nicotine Patch	Heavy Dependency- a pack daily or more 21 mg for 2 weeks, 14 mg for 2 weeks, 7 mg for 2 weeks Mild Dependency- 1/2 pack a day 14 mg for 2 weeks, 7 mg for 2 weeks	Allergy Pregnancy Unstable angina	Sleep disturbances Skin irritation Headache
Zyban	150 mg qd for 3 days, 150 mg bid for 7-12 weeks	Seizure disorders Predisposition to seizure disorders by disease or contaminant drugs MAOIs Allergy	Sleep disturbances Dry mouth Headache

Name	Dosing Regimen	Contradictions	Adverse Drug Reactions
Nicotine Gum	Fewer than 25 cigarettes/day: 2 mg strength More then 24/day: 4 mg strength 1 piece q 1-2 hr for 6 weeks, 1 piece q2-4 hr for 3 weeks, 1 piece q 4-8 hr for 3 weeks	Allergy Pregnancy	Nausea, dyspepsia, jaw fatigue, risk of dependency
Clonidine	150-400 mg mcg/day orally, or 200 mcg/24 hr patch	Allergy Coronary insufficiency, recent MI Pregnancy	Dry mouth, drowsiness, sleep disturbances, dizziness
Nortriptyline	25 mg qd for 1 week before quit, titrate to 75 mg qd or maximum tolerated for 8	Allergy MAOIs Recent MI	Dry mouth, drowsiness, hypotension

How to Choose Pharmacotherapy

Zyban: Highly addicted/High user- over a pack a day

- long smoking history
- tried other methods of quitting
- increased cravings
- irritability with quitting
- concerned about weight gain
- adhesive allergies

How to Choose Pharmacotherapy

Nicotine Replacement Patch:

- No experience with cessation attempts
- short smoking history
- Already on anti-depressant medicine
- Patient declining Zyban (fear of medication)

How to Choose Pharmacotherapy

Combination of Patch & Zyban:

- Increased cravings on patch
- Can add Zyban to patch or patch to Zyban
- Combination *may* increase abstinence rate to 35%
- **Published Abstinence rate**
  - **Zyban alone-30%**
  - **Patch alone-16%**

How to Choose Pharmacotherapy

Side effects

- Medication discontinuation rate may be up to 35%- 40% with all medications secondary to side effects

Side Effect Rate			
	Patch	Zyban	Combination
Headache	28%	26%	26.6%
Insomnia	30%	42%	47.5%

Key Points

- Everyone needs to be asked
- Tobacco cessation is a change process and success is measured by the forward moves through the stages of change
- Pharmacotherapy combined with a behavioral program is a cornerstone
- Relapse prevention counseling is necessary
- Providers can make a significant difference in patient’s motivation and success